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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,784	06/18/2001	Hiroshi Itoh	010746	1612

38834 7590 03/09/2005

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EXAMINER

BRINICH, STEPHEN M

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/881,784	ITOH, HIROSHI	
	Examiner	Art Unit	
	Stephen M Brinich	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/27/01</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, lines 2-3 and claim 4, line 5, the phrase "operates pixel signals" is unclear as to what operation is performed.

In claim 6, lines 7-8, the term "fault pixel detecting circuit" lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United

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States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Takayama et al.

Re claims 1-2, Takayama et al discloses (column 3, lines 1-28) a color image processing arrangement in which pixels are provided with a plurality of respective color filters (R, G, B). Defective pixels are detected by correlating a target pixel value with the values of adjacent pixels having the same color filter as the target pixel, and then pixel signals corresponding to the defective pixels are corrected.

Allowable Subject Matter

5. Claims 3-6, insofar as they are understood, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. Claims 7-8 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 3-4 & 7 (and dependent claims 4-5 & 8), the art of record does not teach or suggest the recited operations upon sets of non-identical filter colored pixels in conjunction with

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the recited detection and correction of defective pixels via correlating a target pixel value with the values of adjacent pixels having the same color filter as the target pixel.

Re claim 6, the art of record does not teach or suggest the recited processing of predetermined color image signals via a line memory in conjunction with the recited use of the line memory for detection and correction of defective pixels via correlating a target pixel value with the values of adjacent pixels having the same color filter as the target pixel.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Katoh et al, Watanabe et al, Matsukawa, and Wang disclose additional examples of defective pixel detection and correction in image sensing devices in which pixels are provided with respective color filters.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 703-305-4390. The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2600 Customer Service center at 703-306-0377.


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If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 703-308-7452.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 703-872-9306.

Hand-carried or courier-delivered correspondence pertaining to this application should be directed to

US Patent and Trademark Office
220 South 20th Street
Crystal Plaza Two, Lobby, Room 1B03
Arlington VA 22202


Stephen M Brinich
Examiner
Art Unit 2624

smb
March 3, 2005